



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/591,198	08/30/2006	Dieter Groezinger	VMP-40009	7398
66919	7590	01/29/2008		
PYLE & PIONTEK ATTN: THOMAS R. VIGIL 221 N LASALLE STREET , ROOM 2036 ROOM 2036 CHICAGO, IL 60601			EXAMINER LIN, KUANG Y	
			ART UNIT 1793	PAPER NUMBER
			MAIL DATE 01/29/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/591,198

Applicant(s)

GROEZINGER, DIETER

Examiner

Kuang Y. Lin

Art Unit

1793

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over SU 1,196,096.

SU '096 substantially shows the invention as claimed except that it does not disclose to make the compact pressure. However, it is conventional to use a compact molding machine or pressure blowing machine for pressuring the foundry mixture during core making process. Thus, it would have been obvious to use a compact molding machine or pressure blowing machine for forming core of SU '096 in view of the conventional practice. With respect to claim 2, it is conventional to add borate into phosphate binder for making foundry core (see, for example, US 5,573,055 to Melling et al.) With respect to claim 3, it is also conventional to add parting agent into the foundry mixture to facilitate core removal process. With respect to claims 4 and 5, it is conventional to make the phosphate binder from aluminum phosphate, boron phosphate, etc. (see, for example, DE 10,065,075 or US 5,262,100 to Moore et al. (col. 7, line 32)).

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 3,764,575 to Anderko et al. and further in view of US 5,573,055 to Melling et al.

Anderko substantially shows the invention as claimed except that it use resin, instead of phosphate, as a binder. However, Melling shows to use phosphate

and/or borate as a binder to avoid the use of any organic materials which would volatilize or burn out when the mold is heated at high temperatures (see, for example, col. 4, lines 4-7). It would have been obvious to use the phosphate and borate binder of Melling in the water soluble salt core of Anderko in view of the advantage. With respect to claim 3, it is also conventional to add parting agent into the foundry mixture to facilitate core removal process. With respect to claims 4 and 5, it is conventional to make the phosphate binder from aluminum phosphate, boron phosphate, etc. (see, for example, DE 10,065,075 or US 5,262,100 to Moore et al. (col. 7, line 32)).

4. Applicant's arguments filed Jan. 7, 2008 have been fully considered but they are not persuasive.

Applicant in page 6 of the response stated that the claimed water soluble core was sintered at approximately 200 degrees and heated to under 700 degree C. Applicant further stated that none of the prior art process includes these process steps. However, it is noted that claims 1-7 are in a product-by-process format and the soluble core of SU '096 is also heated to 300 degree C. Thus, the claimed product appears to be the same or similar to that of the prior art. See MPEP 2113. The soluble core of Anderko et al, as modified by Melling et al. (wherein Melling et al. also heats the core at 350 degree C, see col. 3, lines 56-60). Again, the claimed product appears to be the same or similar to that of the prior art.

Applicant further stated that the sintering of the instant process includes compression and heat. However, the sintering process does not necessary include compression.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kuang Y. Lin whose telephone number is 571-272-1179. The examiner can normally be reached on Monday-Friday, 10:00-6:30,.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jonathan J. Johnson can be reached on 571-272-1177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/591,198
Art Unit: 1793

Page 5

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kuang Y. Lin/
Primary Examiner
Art Unit 1725

1-25-08